

# Rural Clean Energy Work Group

Meeting #2

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Energy Division

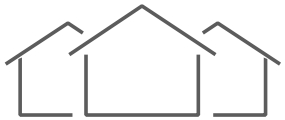
NOVEMBER 30, 2021



Washington State  
Department of  
**Commerce**

# We strengthen communities

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**HOUSING  
HOMELESSNESS**



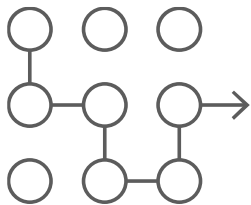
**INFRASTRUCTURE**



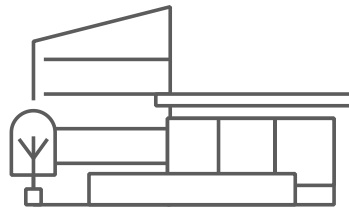
**BUSINESS  
ASSISTANCE**



**ENERGY**



**PLANNING**



**COMMUNITY FACILITIES**



**CRIME VICTIMS &  
PUBLIC SAFETY**



**COMMUNITY  
SERVICES**

# Virtual Meeting Reminders

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- The presentation portions of the meeting will be recorded
- Raise your hand, use the chat box and then unmute to ask questions or contribute to the discussion
- If possible, turn on your camera when you are speaking
- Don't forget to mute yourself when you are not speaking
- Reach out to **Queenie Karlik** for technical help



# Agenda

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- Welcome and introductions
- Community agreements and meeting guidelines
- Timeline
- 2021 State Energy Strategy
- Clean energy policies and programs
- Breakout groups:
  - #1 Technologies, programs, investments that address rural community priorities
  - #2 Barriers to meeting the needs of rural communities

# Goals of Today's Workshop

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- Get to know each person in the room
- Learn about the 2021 State Energy Strategy
- Brainstorm clean energy technologies, investments and programs to address rural community priorities
- Identify and rank barriers to meeting rural community needs and achieving policy outcomes

# Introductions

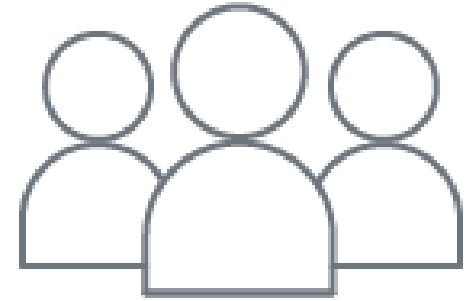
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- Please introduce yourself if you weren't at the last meeting
  - Name
  - Title
  - Organization
  - One sentence overview of your organization's mission

# Community Agreements

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- Be present!
- Step up, step back
- Respond to and challenge ideas, not people
- Protect confidences: Stories stay, lessons leave
- Avoid jargon, acronyms, and industry language - use inclusive language that is accessible for people with varying inside knowledge



# Work Group Timeline Detail

RURAL CLEAN ENERGY LEGISLATIVE REPORT		
TASK DESCRIPTION	TIMING	FOCUS
Kickoff Meeting #1	Early October	Introductory meeting: history of CEF, background, context, proviso, roles and responsibilities
Meeting #2	November	Technologies, programs and investments that address rural community priorities and align with the 2021 State Energy Strategy
		Breakout groups
		Report back, identify emerging ideas and themes
Meeting #3	December	Policies that dismantle barriers; federal opportunities, and recommended strategies for leveraging federal funds with CEF; review draft recommendations
Meeting #4	January 2022	Finalize recommendations and strategic plan
Public comment	January	Opportunity for public comment in response to recommendations from work group
Commerce process	February-June	Circulate report for internal review, and for OFM and Governor's office review and processing



# 2021 State Energy Strategy Background

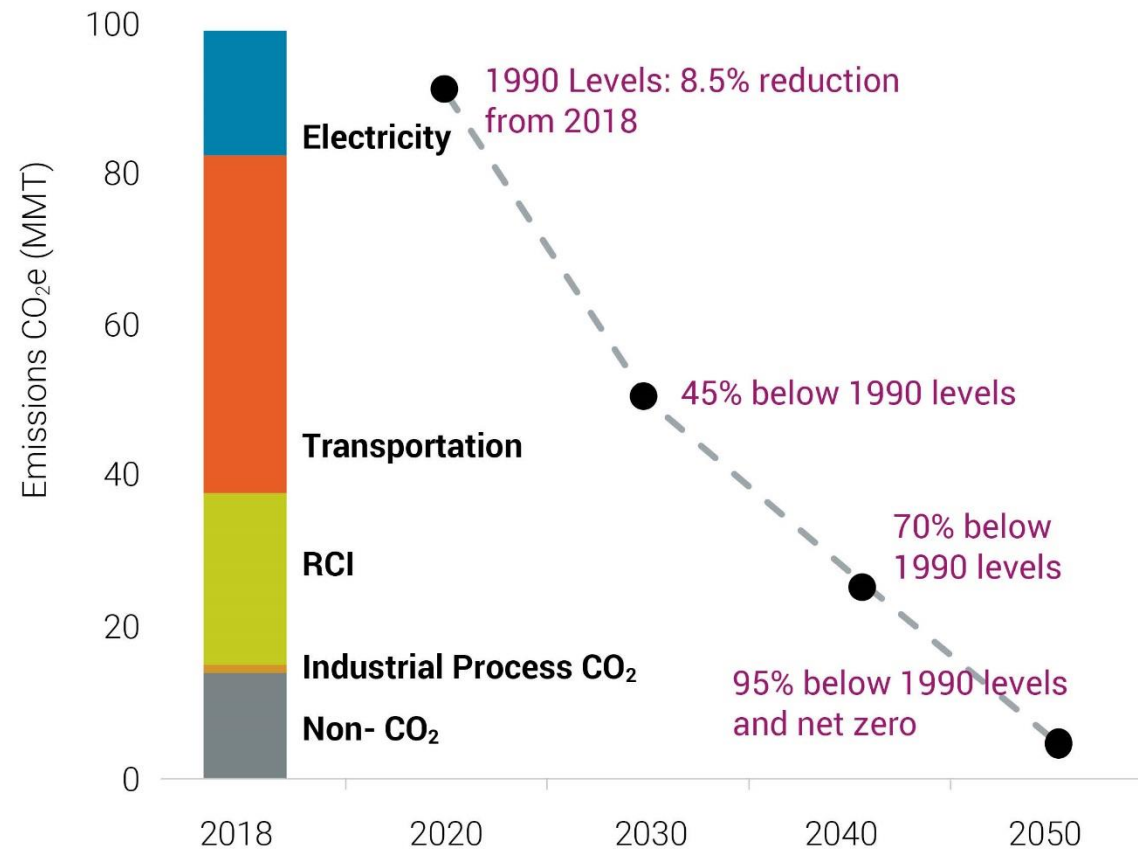


# Specific Directives in 2019 Legislation

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- Align strategy with clean electricity laws
  - Energy Independence Act (I-937, 2006)
  - Clean Energy Transformation Act (SB 5116, 2019)
    - After 2025, no coal in resource mix
    - By 2030, greenhouse neutral electricity supply
    - By 2045, 100% renewable or non-emitting sources
- Align strategy with greenhouse gas emissions limits (HB 2311, 2020)
  - By 2030, 45% below 1990 levels
  - By 2040, 75% below 1990 levels
  - By 2050, 95% below 1990 levels and achieve net-zero emissions.

# Meeting State Emissions Reduction Limits



Source: Washington State Department of Ecology and Washington State.

Appendix A –Deep Decarbonization Pathways Modeling Technical Report, December 11, 2020 (p. 15).

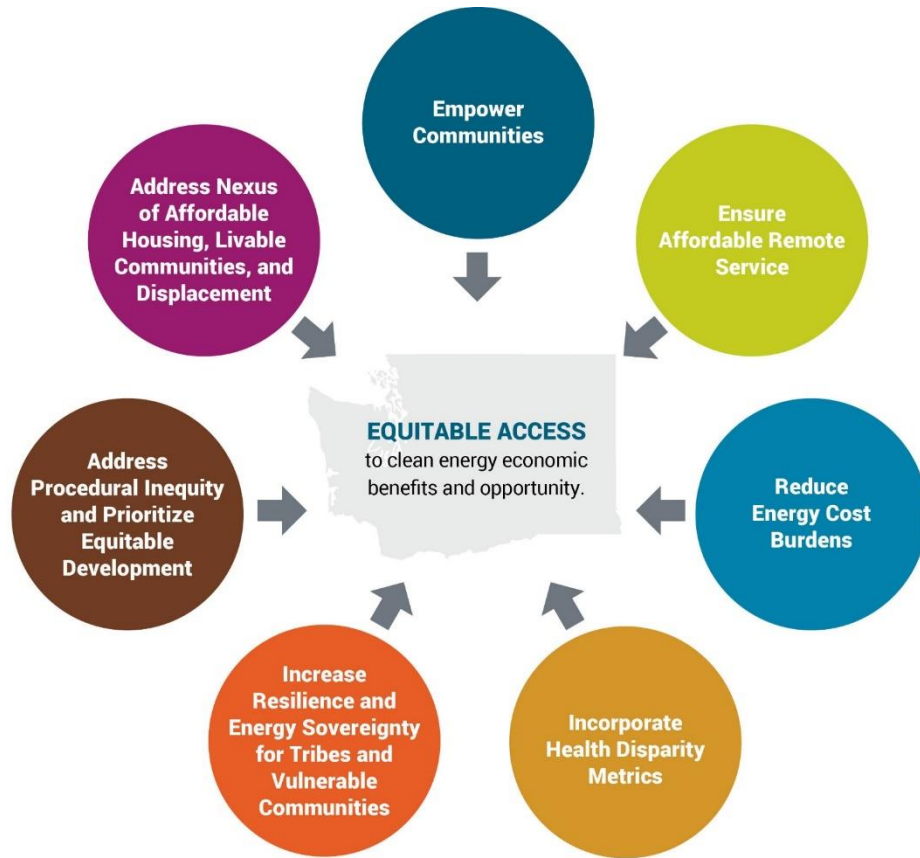
# Cross-Sector Considerations

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- Maintaining reasonable and fair **prices** and sufficient **supply** of energy
- Promoting a competitive clean energy **economy** and **workforce** development
- Understanding and addressing the needs of **low-income and vulnerable populations**
- Reaching and responding to both **urban and rural communities**



# Ensure Equitable Transition for Communities



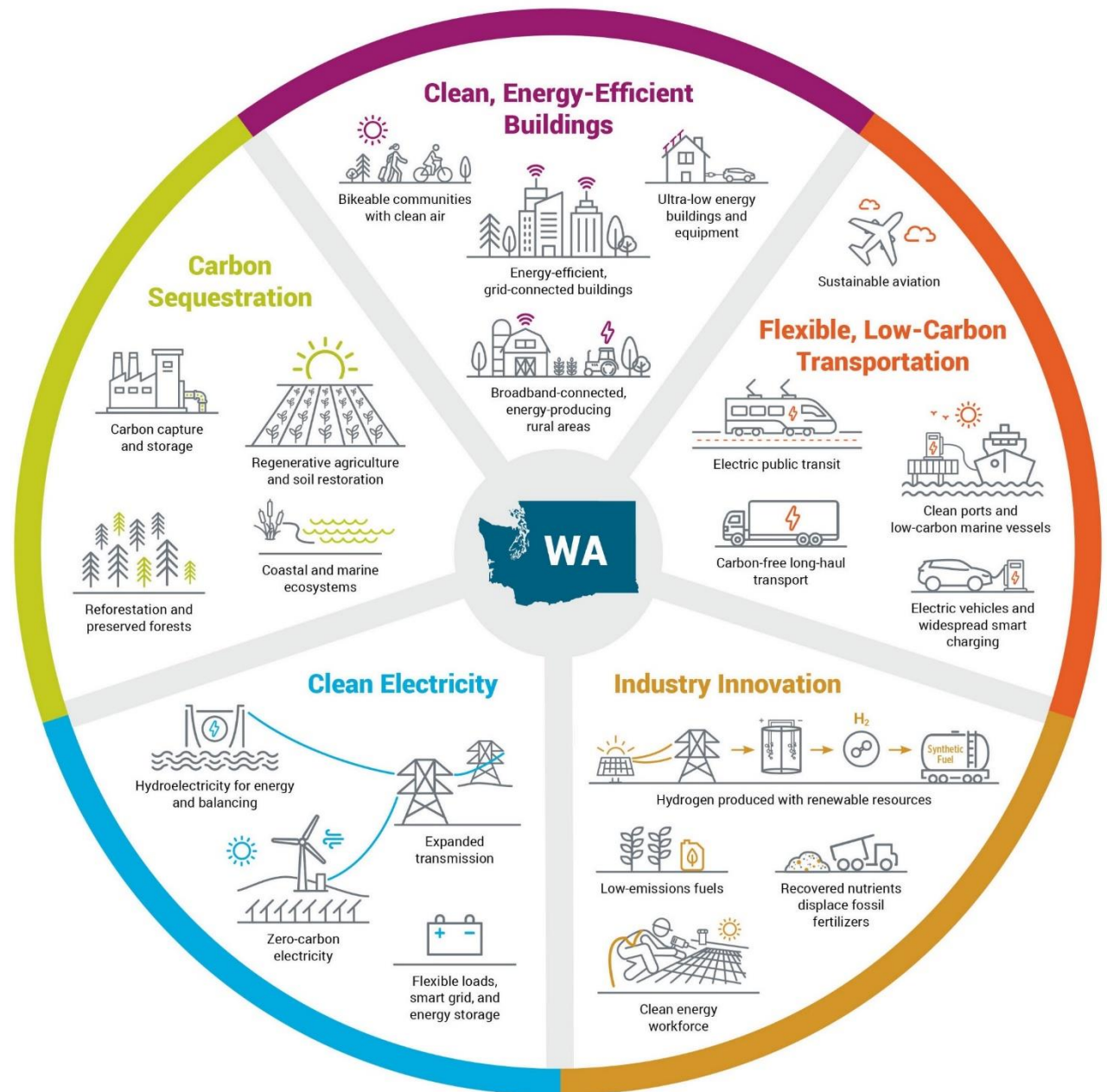
- Apply explicit equity principles
- Ensure impacted communities design solutions
- Invest in equitable and inclusive transition
- Support workers in transition
- Universal broadband access as foundation for transition

Source: Washington State Department of Commerce

## WASHINGTON STATE 2050

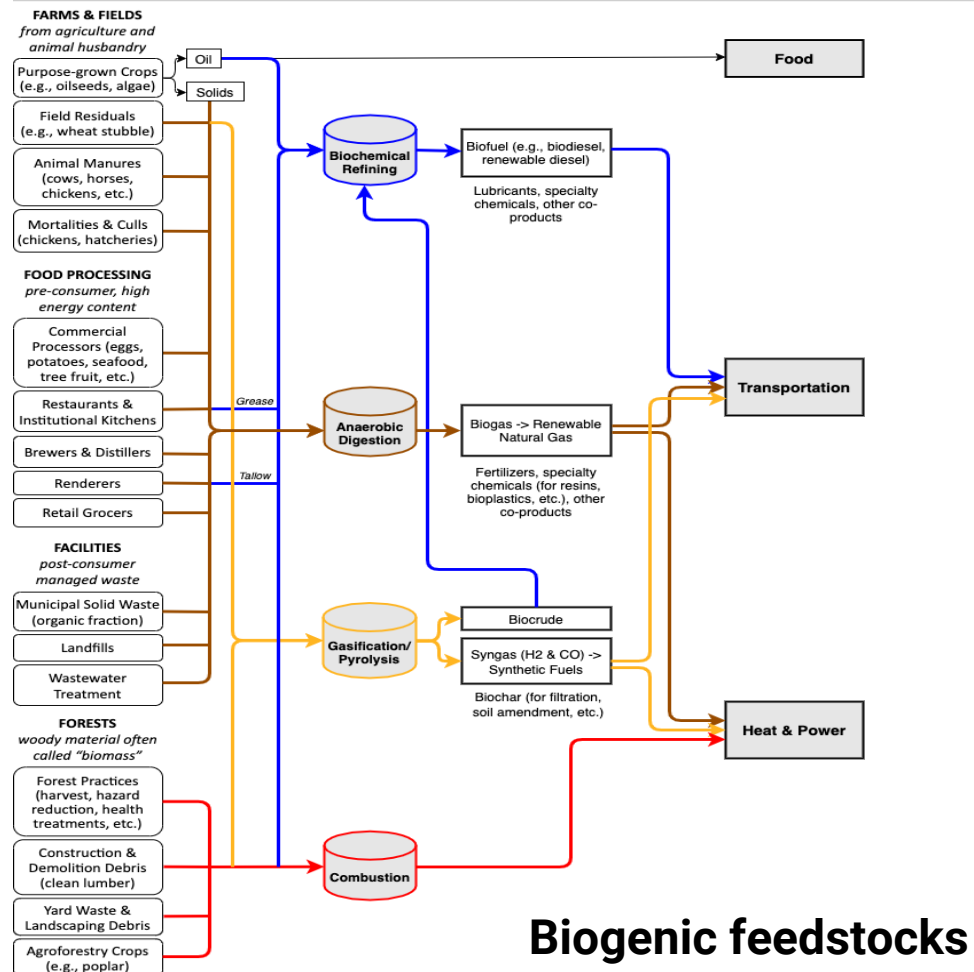
# Net-Zero Vision

A blueprint for how we can meet our state's climate goals to nearly eliminate the use of climate-threatening fossil fuels by 2050, while growing a prosperous economy and maintaining affordable and reliable energy supplies.





# Rural Energy Strategies in the SES



**Rural broadband**

# Enable Energy Independence

- **Recommendation:** Ensure decarbonization for rural public buildings through funding allocations
- Need to expand scope and funding scale for home rehabilitation revolving loan program for low-income, owner-occupied households in rural communities
- Lack of access to energy assistance and weatherization programs
- Grants for resilience hubs in rural areas; <http://resilience-hub.org/>
- Support for agrivoltaics

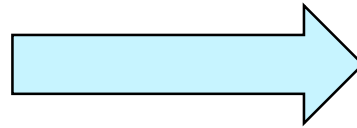




# Building on the State Energy Strategy

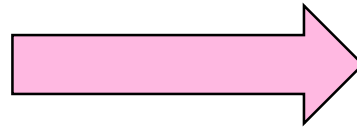
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**State Energy Strategy**



Sector specific  
recommendations  
based GHG  
reduction  
modeling

**Rural Energy Work Group**



Clean energy  
strategies derived  
from rural  
priorities

# Policies and Programs



# New Legislation (2019-2021)

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- Clean Energy Transformation Act (SB 5116)
- Clean Buildings Bill (HB 1257)
- Clean Fuel Standard (SB 1091)
- Climate Commitment Act (SB 5126)
- Health Equity for All (HEAL) Act 2.0 (SB 5141)\*
- Forest Health & Wildfires (HB 1168)



\*The HEAL Act 2.0 (SB 5141) is based on 2019-2020 Washington Environmental Justice Task Force recommendations.

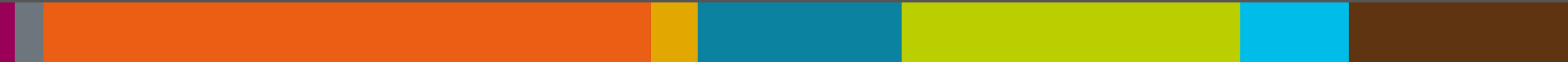
# 2021 SES Eligible Technology List

Category	Outcome	Technology
Communities	Enhancing resilience in rural WA	Resilient Distributed Energy
Transportation	Decarbonization of transportation sector	Electric Vehicles
		Electric or Hybrid Marine Vessels
		Electric or Hybrid Short-Haul Aircraft
		Battery Technologies
		Hydrogen Produced from Renewable Resources
		Renewable Hydrogen Storage and Distribution
		Hydrogen Fuel Cells
		Advanced Biofuels
Buildings	Reduce energy consumption and emissions in the built environment	Building Electrification
		Energy Efficiency
		Low-Carbon Building Materials
		Grid-Connected and High-Efficiency Electric Heat Pumps and Water Heaters
Industry	Promote development of green hydrogen production, clean fuels refining and carbon capture	Advanced Bioenergy and Biorefining
		Renewable Hydrogen Storage, Distribution and Dispensing
		Hydrogen Produced from Renewable Resources
		Battery Recycling
		Development of New Earth Abundant and Lightweight Materials
		Carbon Capture, Use and Storage:
		<ul style="list-style-type: none"> <li>Direct Air and Flue Gas Capture</li> <li>Geological Storage</li> </ul>
Electricity	Develop distributed energy resources with smart grid capabilities, including consumer equipment, to ensure reliability and flexibility	Renewable and Distributed Energy Production
		<ul style="list-style-type: none"> <li>Wind</li> <li>Solar</li> <li>Bioenergy</li> <li>Hydrogen</li> <li>Hydrokinetic</li> <li>Geothermal</li> </ul>
		Advanced Energy Storage
		Transmission and Distribution
		Smart Grid and Grid Controls
		Energy Efficiency

# 2021 SES Eligible Technology List and CEF

Category	Outcome	Technology	RD&D	ETS	Grid Mod	GNL	Building	Direct	Rural
<b>Communities</b>	Enhancing resilience in rural WA	Resilient Distributed Energy							
<b>Transportation</b>	Decarbonization of transportation sector	Electric or Hybrid Marine Vessels	✓						
		Electric or Hybrid Short-haul Aircrafts	✓						
		Efficient Freight Vehicles	✓						
		Electric Vehicles	✓	✓					
		Hydrogen Fuel Cells	✓						
		Battery Technologies	✓					✓	
		Renewable Hydrogen Dispensary, Storage Or Distribution Technology	✓	✓				✓	
		Advanced Biofuels	✓		✓				
<b>Buildings</b>	Reduce energy consumption and emissions in the built environment	Grid Connected And High-efficiency Electric Heat Pumps	✓		✓		✓		
		Energy Efficiency	✓		✓	✓	✓		✓
		Building Electrification	✓		✓		✓		
		Low-carbon Building Materials	✓						
<b>Industry</b>	Promote development of green hydrogen production, clean fuels refining and carbon capture	Advanced Bioenergy And Biorefining	✓						
		Development of New Earth Abundant Materials of Lightweight Materials	✓						
		Battery Recycling	✓						
		Carbon Capture, Use and Storage: Geological storage	✓						
		Carbon Capture, Use and Storage: Biological storage							✓
		Carbon Capture, Use and Storage: Direct Air and Flue Gas Capture	✓						
		Renewable Hydrogen Storage, Distribution and Dispensing	✓		✓				
		Nutrient Recovery							✓
<b>Electricity</b>	Develop distributed energy resources with smart grid capabilities and in consumer equipment to ensure reliability and flexibility	Organic Waste Management							✓
		Renewable and Distributed Energy Technologies: Solar	✓			✓			
		Renewable and Distributed Energy Technologies: Wind	✓						
		Renewable and Distributed Energy Technologies: Bioenergy	✓		✓				✓
		Renewable and Distributed Energy Technologies: Hydrogen	✓		✓				
		Renewable and Distributed Energy Technologies: Hydrokinetic	✓		✓				
		Renewable and Distributed Energy Technologies: Geothermal	✓						
		Beneficial Electrification							✓
		Advanced Energy Storage	✓		✓	✓			
		Smart Grid and Grid Controls	✓		✓				
		Transmission and Distribution	✓		✓				
		Energy Efficiency	✓		✓	✓	✓		

# Questions



# Break

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- Break ends at 10:00am



# Homework

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- **Exercise #1:** Identify how clean energy technologies address rural community priorities
- **Exercise #2:** Barriers that exist in policies, programs or investment for meeting the needs of rural communities; potential recommendations for addressing these barriers



# Discussion

- **Breakout Exercise 1:**
  - Which clean energy technologies ranked a high priority for addressing rural community priorities
- **Breakout Exercise 2:**
  - Rank the importance and urgency of addressing the barrier



# Next Steps and Reminders

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- **Stipend program**
- **Commerce:**
  - Distribute summary of meeting notes
  - Post presentation slides and recordings to website
  - Send out public comment form and letter
- **Work Group:**
  - Share public comment form with communities
  - Complete scheduling poll for January

# Thank you!

Angela LaSalle

GRANTS MANAGER

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